

## PATENT ABSTRACTS OF JAPAN

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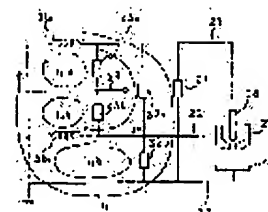
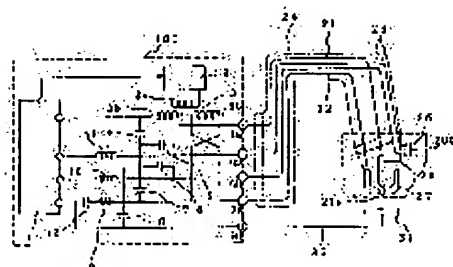
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## (54) ARC STARTER

## (57)Abstract:

PURPOSE: To decrease high-frequency leak currents by bisecting the secondary winding of a high frequency generator, connecting one winding in series to a main electrode, connecting the other winding in series to an auxiliary electrode and providing the same polarities to the two electrodes.

CONSTITUTION: The secondary winding 3 of the high-frequency coupling coil 3 of a plasma are working device is bisected to 3b1, 3b2. The winding 3b1 is connected in series to the main electrode 26 and the winding 3b2 is connected in series to the auxiliary electrode (chip electrode) 27. The polarities are determined at the polarities at which the voltage of the sum of the output voltages of the windings 3b1 and 3b2 is impressed between the main electrode 26 and the chip electrode 27. z1, z2a, 2zb, z3a, z3b are respectively the leak impedances of high frequencies and i1, i2a, i2b, i3a, i3b are the leak currents of closed circuits. The currents flowing in cables 23, 32 are offset to approximately zero and the high-frequency leak currents are decreased to the value as low as about 1/2 to 1/3.



## LEGAL STATUS

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